

### **Responses to Examiner's Remarks in Detailed Action**

Reconsideration of the application is respectfully requested. The Application stands rejected under 35 USC § 102(b) as to all claims currently pending, on the basis of Walworth et al '751 regarding claims 1 through 9, and on the basis of Weber et al (number not provided by Examiner) regarding claims 10 through 13. Based on the explanation below, Applicant respectfully requests that the Examiner withdraw the rejections.

### **Support for Amendments Made:**

Applicant makes the following amendments, supported by the original specification and drawings as set forth below:

#### **Specification:**

Applicant amends Paragraph 29 to clarify that the term "radially outer surface" indicates the entire surface from and including the compression seat surface 9 through and including the rear seal 64. The amendment is made because some language of the Examiner suggests that the Examiner is considering only rear seal 64, which is the *most* radially outward area shown, to be the entirety of the "radially outward surface" (see the Examiner's rejection of Claim 5 over Walworth '751). This clarification is supported by the text of the specification at paragraphs 29 and 30 as filed, and is clearly delineated in Figure 5 by use of the area bracket showing the entire upper surface area as the "radially outer surface".

Applicant amends Paragraph 39 in connection with the phrase "it being known that rubber tends to deform, but not to compress," for purposes of clarity. The statement as written clearly refers to tendency toward being deformed or actually compressed, comparatively, in response to compression forces (rather than making a statement that rubber cannot compress, as the specification elsewhere refers to compression). The change in grammar is merely intended to make this comparison statement

more clear. Support is thus present at the very location changed as this is merely a clarifying grammatical change. This change should not be interpreted to emphasize a difference between deformation and compression (e.g., it is not intended that locations at which Applicant refers to deformation exclude compression, or vice versa), as those in the art will understand that where there is deformation there is also compression, and where there is compression there is also deformation, as a general matter. The terms deformation and compression therefore should not be seen as exclusive of one another, and in some cases are used interchangeably. Applicant has also amended the terms "tends to" and "typically" in the last two sentences of the paragraph to avoid any argument by implication that the gasket must be of a smaller inner diameter than the outer diameter of the spigot in all installations, as such implication is not correct and was not intended.

Abstract:

Applicant amends the Abstract by deletion of the phrase "The present invention may be basically described as...". As this is solely a deletion of introductory language, no support is believed to be necessary.

Claims:

Applicant recites the location of Specification support for each claim amended in the discussion the amendments below, where deemed necessary or appropriate.

**Information Disclosure Statements** (Examiner's ¶ 1, page 2)

The Examiner objected to the form of the Information Disclosure Statements filed on May 24, 2004 and April 23, 2004, for failure to comply with 37 C.F.R. 1.98(a)(2). Based on the Examiner's explanation, the Applicant understands the objection is made because the Applicant did not provide a copy of each reference. With respect to all but two of the references, Applicant filed the Information Disclosure Statements without copies pursuant to and in reliance upon the notice of the Office entitled Information Disclosure

Statements May Be Filed Without Copies of U.S. Patents and Published Applications in Patent Applications filed after June 30, 2003, 1273 Off. Gaz. Pat. Office 55 (August 5, 2003); <http://www.uspto.gov/web/offices/com/sol/og/2003/week31/patdisc.htm>.

Applicant believes that the waiver applies to this application, which was filed on October 15, 2003. The Image File Wrapper accessible online bears the initials of the Examiner with respect to all but two references, leading the Applicant to conclude that all but those two were considered. Regarding the two references, Japanese patent publication S52-029625 and a published US application 2002/0158466, Applicant encloses herewith an Information Disclosure Statement together with (a) a fee of \$180, and (b) full copies of the references, and requests that they be considered in full. With specific regard to the Japanese reference, the Applicant encloses the best copy available to it, which is drawn from an online database. For the convenience of the Examiner the Applicant also encloses the Abstract information for that reference in English, as translated in the Patent Abstracts of Japan, as well as reported by [www.espacenet.com](http://www.espacenet.com). The undersigned does not have independent knowledge of the content of this reference or its relevance.

### **Specification - Abstract**

The Examiner reminds Applicant of the language and format desired for an Abstract. While the Examiner's comments do not appear to be an express objection, in the interest of advancing examination, and without any intent to limit the scope of the patent, Applicant has provided a substitute paragraph for the application in the Amendments section, above. Specifically, at the suggestion of the Examiner, the phrase "The present invention may be basically described as" has been removed.

### **Claim Objections, (Informalities)**

The Examiner levied the following objections on the basis of the informalities cited as set forth in the left column below, the response to which is set forth in the right hand column:

Objection	Response / Action Taken
Claim 8: Insufficient antecedent basis for	Applicant amends the claim to remove the

"the radially outer surface" in line 2.	"the" and replace it with "a"
Claim 13, line 2, "tooth" should probably be "teeth," according to the Examiner.	Applicant amends the claim to change the word "tooth" at the end of line two of the claim to read "teeth"

Applicant has also amended Claim 9 to refer to "a radially outer surface" rather than "the radially outer surface," for antecedent basis reasons. Additionally, Applicant changes the word "being" in Claim 12 to "having", in order to correct a typographical error in the claim. Applicant thanks the Examiner for the attention to these details, and believes that the correction above both is the correction sought by the examiner and is sufficient to overcome the objections. These amendments are mere formalities and are not intended to be substantive to the claims. They are not believed to require specific locations of specification support.

#### **Claim Rejections, § 102(b)**

##### **Generally Applicable Observation and Response:**

***Weber and Walworth are Push-On Joints:*** Applicant prefaces the discussion of the specific rejections and cited patents with the observation that both Walworth '751 and Weber appear to relate solely to those types of joints identified in paragraph 0004 of the Background section of Applicant's Specification as "push-on" joints. As noted in that paragraph at lines 5 and 6, a push-on joint operates without a gland or other external compression means. By contrast, the stuffing box, or "mechanical joint", assembly referred to in the claims (see Applicant's Figs. 1, 2, 4, and 6) includes a compression gland 11 to impart deformative forces to the gasket. Neither Walworth '751 nor Weber appear to disclose such a construction. As shown in all figures of Walworth '751 and Weber that depict a bell, the bell forms a single static form in which there is no mechanism for variable compression (See Figs. 2, 3, 5, 9, 10, 12, and 13 of Walworth '751 and in Figs. 1 and 2 of Weber). Applicant is unable to find a single figure in either cited

patent that shows use of a compression gland. Accordingly, it must be concluded that the Walworth '751 and Weber patents relate to a different structure that functions differently when compared to the claims. Notably, as shown in Walworth '751 and Weber, a compression gland cannot be added with any functionality, because the lip of the bell (26 in Walworth '751, and the area between 10 and 1 in Weber) shields the gasket and segment from any gland that could be attached.

***Applicant's Claims are Stuffing Box Joints That Employ a Compression Gland:***

By contrast to the Push-On joint structure and function of both Weber and Walworth '751, Applicant's claims as originally filed refer to a "stuffing box" assembly or to "mechanical joints", each of which means that a gland – a tightenable compression device – imparts compressive or deformative forces to the gasket during installation. Weber and Walworth '751 do not meet that limitation, structure, or function. Accordingly, rejection over these references is inappropriate. Applicant respectfully requests withdrawal of the rejection on this basis alone.

To further demonstrate the functional and structural differences, Applicant has amended the claims as follows:

Claim 1 is amended to state that the joint involved includes a "...female pipe portion that is tightenably connected to a gland...". (By dependency, this amendment affects dependent claims 2-6).

Claim 7 is amended in step (b) to state "...compressing the gasket by tightening a gland to the bell to at least partially collapse a gutter..." (By dependency, this amendment affects dependent claims 7-9).

Claim 10 is amended to refer to “tightening of a gland to a bell”, rather than compression

Specification support for the concept of gland tightening is set forth at, among other locations, page 16, line 1; page 19, lines 1-8; and paragraph 40 (page 20). Applicant respectfully requests withdrawal of all rejections of the claims on the basis of these arguments and this submission.

Re: Claims Rejected Over Walworth (1-9)

Applicant reiterates the argument set forth above with respect to the inapplicability of Walworth ‘751 on the basis of its structure as a push-on joint without a compression gland, rather than a joint of the type evidenced in the Applicant’s claims.

In connection with a more detailed argument against the Walworth ‘751 citation, Applicant respectfully notes that it has experienced some difficulty in determining certain of the features referenced by the Examiner, as the reference numbers cited appear to be used by the Examiner differently than they are used by the Specification in Walworth ‘751. Applicant is best able to understand the Examiner’s argument by using the Examiner’s citation of those numbers to refer to general areas of Figure 4a in Walworth ‘751, rather than as reference to particular structures bearing those numbers in the Walworth ‘751 specification or in Figures 1 through 3. To the extent Applicant’s argument below evidences a misunderstanding of the Examiner’s position, Applicant respectfully requests an opportunity to respond following further explanation by the Examiner in a non-final action.

Claim 1:

- a) Applicant notes the amendment in this paper by which the claim now refers to a tightenable connection between the bell and a gland. Walworth '751 includes no gland, and therefore does not include every element of the claim.
- b) Related to the comments regarding absence of a gland from Walworth '751, Applicant notes that Claim 1, now and as originally filed, refers to the gasket as having a "gland-facing surface" (line 2 of subsection a). Because Walworth '751 includes no gland, likewise, the Walworth gasket cannot have a gland-facing surface, and therefore does not include every element of the claim

Claims 2-6:

- a) By dependency, Claims 2 through 6 enjoy the same arguments as set forth for Claim 1, and are to the same extent allowable.
- b) Claim 5 – Walworth does not show a void below the radially outer surface. Applicant believes that the Examiner is referring to the depression in the outer contour of Walworth's gasket (generally in the area that the reference line for number 47 enters the gasket in Fig. 4a). Because this area is actually a part of the radially outer surface, it cannot be said to be "below" the radially outer surface.
- c) Claim 6 – The Examiner argues that Walworth '751 shows a plurality of density regions 42 and 12. Applicant respectfully disagrees by reference to the text of Walworth, which evidences that these reference numbers refer to the retaining elements rather than locations of varying density in the gasket (see, Col. 5, lines 4-21)

Claim 7:

Claim 7 refers, as filed and following amendment, to a method applicable to a restrained **mechanical joint**. As noted above, Walworth '751 is not a mechanical joint, but is a push-on joint. Accordingly, Walworth '751 is

not an appropriate reference for rejection of the claim, as it fails to meet the limitations of the claim. Moreover, as amended, Claim 7 includes reference in step (b) to tightening a gland to the bell, which neither is disclosed in Walworth '751, nor is believed to be possible in the structure shown in that reference. Finally, the Applicant's claim 7 is stepwise, in an ordered progression. Nothing in Walworth '751 suggests or discloses, for example, that a gutter (1) ever collapses, or (2) if a gutter does collapse, that such collapse occurs *after* a sealing relationship has been established.

Claims 8 and 9:

By dependency, Claims 8 and 9 enjoy the same arguments as set forth for Claim 7, and are to the same extent allowable.

Applicant contends that based on the foregoing each and every claim 1 through 9 is distinguishable from Walworth '751 on the basis that Walworth '751 fails to disclose elements or limitations of the claims as set forth. Withdrawal of the rejection and allowance of the claims is respectfully requested.

Re: Claims Rejected Over Weber (10-13):

Applicant reiterates the argument stated above concerning the inapplicability of Weber on the basis of its structure as a push-on joint, rather than a joint of the type evidenced in the Applicant's claims. This argument applies to all of Claims 10 through 13.

Claim 10:

As amended, Claim 10 refers to tightening of a gland to the bell as an activity in response to which the center of pressure changes and deformation occurs. Weber appears to have no gland and no mechanism for supporting or allowing the activity of gland tightening to influence deformation. Weber therefore omits an element of the claim. Applicant respectfully requests withdrawal of the rejection and allowance of the claim.



Claims 11-13:

By dependency, Claims 11 through 13 enjoy the same arguments as set forth for Claim 10, and are to the same extent allowable

Applicant respectfully notes that the information disclosure statements and the Examiner's Notice of References Cited refer to multiple Weber et al references, but the Examiner's argument does not specifically identify upon which Weber et al the argument relies. Applicant has assumed for purposes of this response that the Examiner's citation to Weber et al means the reference cited on the Examiner's Notice of References Cited, specifically, U.S. Patent 5,295,697. Applicant has confirmed that the Examiner's discussion of reference numbers in the argument appears to make sense in connection with the Weber '697 patent (this is not an admission of merit or correctness of the Examiner's argument, but merely a statement that the Examiner's position can be understood if he is referencing the Weber '697 patent, merits of that position aside). (The discussion does not appear to fit with respect to Weber 5,269,569). Applicant also notes that the Examiner's references and discussion could apply to Weber 5,464,228 (submitted in the May 27, 2004 IDS), and that Applicant's arguments herein appear to also apply with equal weight to that reference. To the extent Applicant's argument above relies on the wrong Weber reference or evidences a misunderstanding of the Examiner's position, Applicant respectfully requests an opportunity to respond following further explanation by the Examiner in a non-final action.

#### **Fees**

A request for extension of two months is hereby made and petitioned for, and therefore this response is timely. Appropriate payment for an extension fee is also enclosed by check. In the event any fees, extensions, or petitions are required, all fees are authorized to be charged to Deposit Account 50-0954 (for which the undersigned is an authorized signatory and user); and this paper hereby formally requests and petitions for all applicable and necessary extensions. The Applicant requests that this paper also be

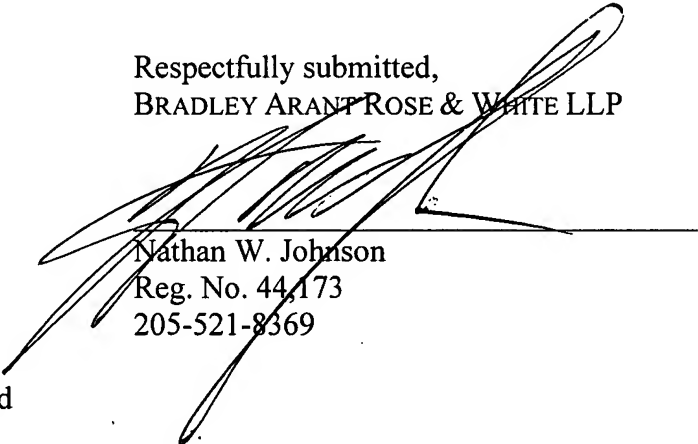
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Response Dated December 13, 2004  
Reply to First Office Action

considered to incorporate, and that it be treated as, a petition to the extent any petition is necessary to maintain pendency of this application.

Applicant has diligently sought to comply with all requirements and to correct all informalities, objections, and rejections. The Application is believed to be in condition for allowance, and a timely Notice of Allowance is respectfully requested.

12/13/2004  
Date

Respectfully submitted,  
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IDS and Reference Copies attached